

REMARKS

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

**3. Claims 32, 36 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al. (US Patent 5,146,507) in view of Phillips (US Patent 4,210,784).**

**4. Regarding Claim 32, Satoh discloses an audio system (Fig. 2) for an automobile 22 having a passenger compartment 23 with two front seats that correspond to the two seats claimed ...**

Phillips discloses a speaker system (Figs 7-10) for an individual automobile seat (column 2, lines 19-26) for radiating sound waves from the quadraphonic (i.e., surround) output of a receiver (column 8, line 63-column 12, line 5).

Claim 32 has been amended to recite that the transducers are positioned with their respective axes “oriented generally parallel to an axis of rotation of an occupant’s head.” As explained in the applicant’s specification, in reference to figures 4A-4C, such an orientation of the transducers’ axes “will give improved performance over the prior art orientations of FIGS. 3A-3C” (p. 3, lines 12-19).

Neither Satoh nor Phillips, alone or in combination, describes or would have made obvious transducers positioned “with an axis of each transducer oriented generally parallel to an axis of rotation of an occupant’s head.”

In Satoh, transducers 24-27 are positioned in the front left, front right, rear left, and rear right of an automobile, respectively, such that the sound signals are to be propagated from the front left, front right, rear left, and rear right directions into the space inside of the automobile. Satoh does not describe and would not have made obvious any transducers oriented generally parallel to the axis of rotation of the occupant’s head . (See Satoh col. 4 lines 29-41; figure 2).

In Phillips, transducers 12a and 12b are positioned with the axis of each transducer oriented generally *towards* the occupant’s head, not parallel to the axis of rotation of the occupant’s head. (See figure 13). This is the very sort of design shown in the applicant’s figure 3A-3C and contrasted with the claimed design shown, for example, in figures 4A-4C. As explained in the applicant’s specification, with an orientation such as Phillips’, “a turning of the user’s head causes a shift in the orientation of the user’s ears relative to the axes of the speakers,

" shifting the balance (p. 3, lines 7-11). Philips would not have made obvious the claimed orientation, because Philips describes the very orientation that the claimed system improves upon.

**5. Regarding Claim 36, in addition to the elements cited above apropos of Claim 32, Phillips further discloses positioning the speakers in a seat-back (Figs. 7-10).**

**6. Regarding Claim 40, in addition to the elements cited above apropos of Claim 32, Phillips further discloses a set of speakers corresponding to an individual seat (Figs. 7-10).**

Claims 36 and 40 are patentable for at least the same reasons as claim 32.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply any other charges or credits to deposit account 06-1050, order 02103-366001.

Respectfully submitted,

Date: \_\_\_\_\_

1/21/01



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